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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,670	01/15/2004	Charles A. Butterfield JR.	HES 2000-IP-001080U1D4	5876
28857	7590	07/08/2004	EXAMINER	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			BOMAR, THOMAS S	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/758,670

Applicant(s)

BUTTERFIELD ET AL.

Examiner

Shane Bomar

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/15/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,425,442 to Latiolais et al in view of either US patent 3,689,110 to Ferguson or US patent 4,426,162 to Tsuchiya et al.

Regarding claims 1, 7, and 8, Latiolais et al teach an apparatus for limiting rotation of a cementing plug that comprises an outer housing 20, and a sleeve 12 or 50 disposed in the housing 20, wherein the sleeve has an inner surface configured to limit the rotation of the plug during drillout (see Figs. 1, 3, 4, and 10; col. 7, lines 27-47, and col. 8, lines 18-22). It is not taught that the sleeve comprises a plurality of segments that have first and second edges, wherein the sleeve segments are connected to one another at said edges.

Ferguson teaches a sleeve 30 that comprises a plurality of segments with first and second edges, wherein the segments are connected to one another at the edges to form the sleeve (see Figs. 1 and 4). Tsuchiya et al teaches a sleeve 4 that comprises a plurality of segments with first and second edges, wherein the segments are connected to one another at the edges to form the sleeve (see Figs. 2 and 3).

It would have been obvious to one of ordinary skill in the art, having the teachings of Latiolais et al and Ferguson or Tsuchiya et al before him at the time the invention was made, to modify the sleeve taught by Latiolais et al to include the segmented sleeve of Ferguson or Tsuchiya et al. One would have been motivated to make such a combination in order to obtain a sleeve that is easy to assemble and will not readily separate, as taught by Ferguson or Tsuchiya et al.

Regarding claims 2 and 13, the combination applied to claims 1 or 7 above teaches that each sleeve segment defines a boss on the first edge and a groove on the second edge for connecting the segments together (see Fig. 4 of Ferguson, or Figs. 2 and 3 of Tsuchiya et al).

Regarding claims 3-5, the combination applied to claim 2 above teaches that the inner surface of the sleeve has a plurality of radially inwardly extending ribs that are triangular in cross-section (see Figs. 4 and 10 of Latiolais et al).

Regarding claim 6, the combination applied to claim 1 above does not expressly teach that the sleeve consists of eight segments, although it would be obvious to one of ordinary skill in the art to use as many segments as were necessary to accommodate the sleeve within any diameter casing.

Regarding claims 9-11, the combination applied to claim 6 above teaches that the inner surface of the sleeve has a plurality of radially inwardly extending ribs that are triangular in cross-section and extend from the upper to the lower ends of the sleeve segments (see Figs. 4 and 10 of Latiolais et al).

Regarding claim 12, the combination applied to claim 7 above teaches that the sleeve is fixedly secured to the casing (see col. 6, lines 37-39 of Latiolais et al).

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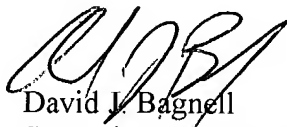
*Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ahlstone teaches sleeve 40 attached to a second sleeve segment 50 (see Fig. 8). Zimmerman teaches a plurality of sleeve segments attached by bosses and grooves (see Figs. 1 and 3).


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 703-305-4849. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

tsb

  
June 30, 2004